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09/467,509	12/20/1999	DAVID L. Hecht	07447.0004-0	2485

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PATENT DOCUMENTATION CENTER  
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ROCHESTER, NY 14644

EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/467,509

Applicant(s)

HECHT ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5. 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1 through 24 are presented for examination.

#### ***Drawings***

2. The informal drawings filed in this application are acceptable for examination purposes.

When the application is allowed, applicant will be required to submit new formal drawings.

#### ***Specification***

3. The use of the trademark Xerox has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
4. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

#### ***Claim Rejections - 35 USC § 112***

5. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “storage media/medium” in claims 1 through 24 is used by the claim to mean “paper”, while the accepted meaning in the art is “a magnetic or optical storage device, such as a hard disk, ROM, RAM, CD-ROM, floppy disk, etc.” The term is indefinite because the specification does not clearly redefine the term. The Examiner would like to point out that where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary

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meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term, see MPEP § 608.01(o). *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). In addition to using the term storage media/medium in a manner contrary to its ordinary meaning, the Applicant fails to meet the requirements of redefining a term as set forth in the MPEP § 2106. In order to define/redefine a term, the Applicant must do so “with reasonable clarity, deliberateness, and precision” and must “set out his uncommon definition in some manner within the patent disclosure’ so as to give one of ordinary skill in the art notice of the change” in meaning. The Applicant fails to clearly, deliberately and precisely define the term storage media/medium by citing “comprising a storage medium, such as plain paper (see Specification page 2),” in this definition it is unclear whether a storage media/medium is limited to paper or encompasses the commonly accepted art definition which includes magnetic and optical storage devices. Furthermore, the Applicant fails to set out the uncommon definition in the instant application’s disclosure. In the instant application, the Applicant merely defines the storage media/medium as an example on page 2 of the Specification.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 1 through 10 and 12 through 24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,457,651 to Paul et al., hereinafter Paul.

8. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

9. As per claim 1, Paul teaches a record for storing encoded information comprising:

a storage medium (column 2, lines 57-63);

first marks on said storage medium having a covert code characteristic, said first marks conveying a covertly marked code (Figures 2 [block 16], 3 [block 18]; column 4, lines 19-29); and

second marks on said medium that convey an overtly marked code useful in decoding said covertly marked code (Figures 2 [block 10a], 3 [block 10b]; column 1, lines 34-42; column 2, lines 51-56; column 4, lines 19-29). Wherein the second marks are drawn to the bar code, and they are useful in decoding the covertly marked code by providing an area in which the glyphs could be printed.

10. Regarding claims 2 and 14, Paul teaches wherein said second marks have an overt code characteristic (Figures 2 [block 10a], 3 [block 10b]; column 1, lines 34-42; column 2, lines 51-56; column 4, lines 19-29).

11. With regards to claims 3 and 15, Paul teaches wherein said covert code characteristic is a chemical taggant and said overt code characteristic is an optically visible state of a glyph (column 6, lines 29-43; column 7, lines 11-16). Wherein the chemical taggant is drawn to the different colors used for the glyphs.

12. Regarding claims 4 and 16, Paul teaches wherein said covert code characteristic of said first marks is visibly undetectable (column 2, lines 44-56).

13. Regarding claims 5 and 17, Paul teaches wherein said covert code characteristic of said first marks does not affect the appearance of said first and second marks (column 5, lines 17-57).

14. Regarding claims 6 and 18, Paul teaches wherein said first and second marks are glyphs (column 7, lines 11-16)

15. With regards to claims 7 and 21, Paul teaches wherein said covertly marked code contains authentication data (column 8, lines 3-8).

16. Regarding claims 8 and 19, Paul teaches wherein said first marks are comprised of a first and a second set of marks, and only said second set of marks convey said covertly marked code (column 6, lines 35-40).

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17. With regards to claims 9 and 20, Paul teaches wherein said overtly marked code identifies the location of said second set of marks (column 2, lines 51-56; column 4, lines 19-29).

18. Regarding claims 10 and 22, Paul teaches wherein said first and second marks at least in part comprise the same marks, with said same marks having both a visibly undetectable covert code characteristic and a visibly detectable overt code characteristic (Figures 2 [block 10a], 3 [block 10b]; column 1, lines 34-42; column 2, lines 51-56; column 4, lines 19-29).

19. Regarding claim 11, Paul teaches further including third marks storing at least a portion of said encoded information, said third marks being distributed among said first and second marks (column 6, lines 35-40).

20. As per claim 12, Paul teaches a method for storing encoded information on a storage medium comprising the steps of:

placing first marks on said medium having a covert code characteristic, said first marks conveying a covertly marked code (Figures 2 [block 16], 3 [block 18]; column 4, lines 19-29); and

placing second marks on said medium adapted to convey an overtly marked code useful in decoding said covertly marked code (Figures 2 [block 10a], 3 [block 10b]; column 1, lines 34-42; column 2, lines 51-56; column 4, lines 19-29). Wherein the second marks are drawn to the bar code, and they are useful in decoding the covertly marked code by providing an area in which the glyphs could be printed.

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21. Regarding claim 13, Paul teaches wherein said second marks include at least a subset of said first marks (column 7, lines 11-16).

22. Regarding claim 23, Paul teaches wherein the first and second marks are applied via tri-level xerography (Figure 4; column 6, lines 14-43).

23. As per claim 24, Paul teaches a method of storing encoded information on a storage medium comprising the steps of:

placing a plurality of visible marks on said medium (Figure 4; column 2, lines 57-63);

placing a covert code characteristic on a select first set of said marks, at least a subset of said first sets defining covert information (Figures 2 [block 16], 3 [block 18]; column 4, lines 19-29); and

wherein at least some of said visible marks are designed to assist in encoding said covert information (Figures 2 [block 10a], 3 [block 10b]; column 1, lines 34-42; column 2, lines 51-56; column 4, lines 19-29). Wherein the visible marks are drawn to the bar code, which assist in encoding the covert information by hiding it from the naked eye.

### ***Conclusion***

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

25. The following patents are cited to further show the state of the art with respect to the general state of the use of glyphs, such as:



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United States Patent No. 5,128,525 to Stearns et al., which is cited to show decoding glyph shape codes.

United States Patent No. 5,168,147 to Bloomberg, which is cited to show decoding glyph shape codes.

United States Patent No. 6,000,613 to Hecht et al., which is cited to show encoding glyphs.

United States Patent No. 6,427,920 to Bloomberg et al., which is cited to show masking of embedded digital data.

United States Patent No. 5,951,055 to Mowry, Jr., which is cited to show a security document containing encoded block data.


United States Patent No. 4,943,239 to Koslin, which is cited to show test and answer score sheet.

United States Patent No. 6,663,008 to Pettersson et al., which is cited to show a coding pattern.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7240.

28. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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Christian LaForgia

Patent Examiner

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